

SCA TISSUE NORTH AMERICA, INC.
ALSIP, ILLINOIS
PROJECT SUMMARY

I. INTRODUCTION

SCA Tissue North America (SCA Tissue) has applied for a Title I federally enforceable permit for its existing paper recycling plant in Alsip, which it purchased in 2001. This permit would address requirements of Major Stationary Sources Construction And Modification (MSSCAM) 35 IAC Part 203 for volatile organic material (VOM) from the plant. This permit would be issued in conjunction with a Consent Decree that addresses the plant's historic failure to comply with MSSCAM.

II. SOURCE DESCRIPTION

SCA Tissue recycles waste paper to manufacture paper tissue. The plant was originally constructed in 1988 under the name of Wisconsin Tissue, has undergone three ownership changes since then and currently co-exists with FSC Paper and Alsip Paper Condominium. The latter two sources are treated as a single source under Part 203 whereas SCA Tissue is treated separately from them.

There are two principal process areas at the plant. In the Pulping Process Area, fiber is received from the warehouse, blended with water, and pulped to separate the paper fibers. If necessary, dirt, paper fillers, and ink are washed from the fiber in a series of vessels with the aid of chemical surfactants and polymers. The cleaned fiber is partially dewatered and stored in a large vessel, commonly called a high-density chest. In this area, process water is filtered for reuse, and excess water is treated before being sent to the local municipal wastewater treatment plant.

The cleaned fiber is pumped from the high-density chest to stock preparation in the Paper Machine Process Area. The fiber receives further physical preparation and additives to impart desirable physical properties to the fibers. The prepared fiber is then pumped to the wet end of the paper machine where the fiber is spread out on a bed of wire. The wire is periodically cleaned with solvent to inhibit and remove accumulation of "stickies" on the wire that result in "holes" in the paper product. The pulp drains and forms into a wet mat that is pressed and dried to form the tissue paper. The tissue paper winds onto massive spools. From the spools

the paper is trimmed into rolls for shipping to converting plants. VOM is generated during processing by the volatilization of organic materials in the paper. VOM emissions are further generated during paper drying and during treatment of wastewater.

III. PLANT EMISSIONS

The permitted VOM emissions from the entire plant, as established by this permit, would be 75 tons/year. This limit reflects reductions made at the source through process changes over several years when the plant emitted VOM in excess of 200 tons per year.

IV. CONSENT ORDER

Following review of Wisconsin Tissue's Title V permit application, enforcement was initiated in May 1999. Historical VOM emissions generated by Wisconsin Tissue and its predecessor were near or in excess of 200 tons per year in the early to mid 1990's. The major source threshold for VOM at the time of initial operation was 100 tons per year. As applicable requirements for a new major source were not addressed by Wisconsin Tissue's predecessor, construction was in violation of MSSCAM. Because of the compliance problems experienced with the plant, SCA Tissue and the various predecessors of the tissue mill have been the subjects of an enforcement action brought by the Illinois EPA and the Illinois Attorney General's Office. The parties anticipate reaching a settlement agreement in the near future. The settlement agreement will likely include the imposition of a civil penalty, the acquisition of emission offsets and, consistent with the terms of this permit, demonstration of LAER.

V. MSSCAM REQUIREMENTS AND LAER DISCUSSION

For any major project, such as the construction of this plant in the late 1980's, the state rules for MSSCAM, 35 IAC Part 203, require: 1) an emission limit for volatile organic materials that represents LAER, 2) compensating VOM emission reductions from other sources commonly called offsets, 3) an analysis of alternatives to the project, and 4) proof that other existing major sources owned by the permit applicant within Illinois are in compliance with

applicable air pollution regulations. A discussion of these requirements follows.

- A. LAER is defined at 35 IAC 203.301 as the most stringent rate of emissions based on the following:
- 1). The lowest emission limitation, which is contained in the implementation plan of any state for such class or category of stationary source, unless it is demonstrated that such limitation is not achievable;
 - 2). The lowest emission limitation which is achieved in practice or is achievable by such class or category of stationary source; or
 - 3). The applicable New Source Performance Standard.

SCA Tissue has prepared a LAER demonstration identifying the techniques and emission limits to reduce emissions by over 85% from the emission rate originally emitted soon after the plant began operations. The Illinois EPA has determined that LAER for the various operations at the plant is the use of low VOM-containing materials.

B. Emission Offsets

The emissions associated with a major project in a nonattainment area must not interfere with the state plan to achieve attainment of the national ambient air quality standards. This plan consists of new programs and regulations designed to achieve the national standards and are based on a detailed analysis of current and projected emission and air quality levels. In order to account for the emission increase from a major project proposed in a nonattainment area, the applicant must provide compensating emission reductions from other sources that have not been relied on in the attainment plan. These emission reductions are commonly referred to as emission offsets. SCA Tissue must obtain creditable emission decreases or offsets from the existing sources in the Chicago ozone nonattainment area.

Because the Chicago area is now a severe ozone nonattainment area, emission offsets at a ratio of 1.3:1.0, i.e., for each ton of VOM emissions from a project, 1.3 tons of offsets must be provided. However, since the construction of this plant occurred at a time when the offset ratio was only 1.0:1.0, SCA Tissue is required to provide an emission offset of 75 tons per year. Offsets will be provided to SCA Tissue by a shutdown source in the Chicago ozone nonattainment area, most likely due to the shutdown of Viskase Corporation about two years ago.

C. Existing Source Compliance

SCA Tissue does not operate any other source in the State of Illinois.

D. Analysis of Alternatives to the Proposed Project

SCA Tissue has provided an analysis of alternatives that concludes that from an economic, environmental, and energy viewpoint, the benefits of the proposed project (i.e., reductions of VOM) outweigh other alternatives (such as, installation of controls). In this regard, a plant that recycles paper is beneficial as it saves on waste that would otherwise have to be landfilled or incinerated.

VI. APPLICABLE EMISSION STANDARDS

The paper recycling operations must meet the requirements of 35 IAC Part 218, Subpart TT. This permit relies upon the plant's operations complying with the VOM standard set in 35 IAC 218.986(c) which is applicable because VOM emissions from the plant exceeded 25 tons/year. The plant is currently in compliance to these requirements because of the pollution prevention changeovers it has conducted over the years to reduce VOM emissions.

The plant's wire cleaning operations, where solvent is used to remove the "stickies" from the wire tray, are not currently in compliance with 35 IAC 218.301, i.e., actual organic material emissions are in excess of 8 pounds per hour. This requirement will not be addressed in this permit but is being addressed in the Consent Order. It is

contemplated that the source will obtain an adjusted standard from the Board from 35 IAC 218.301.

VII. PROPOSED PERMIT

The conditions of the proposed permit contain limitations and requirements for the cleaning and material usage operations to minimize VOM emissions through LAER and Reasonably Achievable Control Technology (RACT). The permit also establishes appropriate compliance procedures, which include recordkeeping and reporting requirements.

The Clean Air Act Permit Program (CAAPP) permit for this source will be revised to incorporate all requirements and limitations of this permit after the Consent Order is finalized. It is anticipated that the current appeal of the CAAPP permit will be dropped then also.

VIII. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that the proposed permit meets applicable state and federal air pollution control requirements. The Illinois EPA is therefore proposing to issue a permit for the plant.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 Ill. Adm. Code Part 166.

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